

What is claimed is:

[Claim 1] 1. A method of manufacturing breadcrumbs, comprising:
forming a mixture;
extruding said mixture to form loaves;
surface drying said loaves in a first drying step;
comminuting said loaves to form particles having a smaller size than said loaves; and
further drying said particles in a second drying step to obtain the breadcrumbs.

[Claim 2] 2. The method of claim 1, wherein said surface drying step comprises a drying temperature of about sixty to about eighty degrees Celsius (about 60° to about 80° Celsius).

[Claim 3] 3. The method of claim 1, wherein said first drying step and/or said further drying step comprise a fluid bed dryer.

[Claim 4] 4. The method of claim 1, wherein said surface drying step comprises a drying temperature of over about 250° Celsius.

[Claim 5] 5. The method of claim 1, wherein said comminuting step comprises a first cutting step for coarse cutting followed by a second cutting step for fine cutting.

[Claim 6] 6. The method of claim 1, wherein said comminuting step comprises a cutting step for a first size reduction followed by a grinding step for a second size reduction.

[Claim 7] 7. The method of claim 1, wherein said surface drying step is followed by a tempering step to expose said loaves to ambient air.

[Claim 8] 8. The method of claim 7, wherein said loaves are exposed to ambient air for about an hour.

[Claim 9] 9. The method of claim 1, wherein said loaves comprise about 10 to about 40 millimeters in diameter and about 10 to about 50 millimeters in length.

[Claim 10] 10. The method of claim 1, wherein said mixture is cooked during said extrusion step.

[Claim 11] 11. The method of claim 1, wherein said further drying step is followed by a sizing step.

[Claim 12] 12. The method of claim 1, wherein said mixture comprises a water content at said extruding step of about thirty-five to about forty-five percent (about 35 to about 45 %).

[Claim 13] 13. The method of claim 12, wherein said loaves comprise a water content at said surface drying step of about twenty to about twenty-five percent (about 20 to about 25 %).

[Claim 14] 14. The method of claim 13, wherein said breadcrumbs comprise a water content at said further drying step of about ten to about three percent (about 10 to about 3 %).

[Claim 15] 15. A system for manufacturing crumbs from a raw material mixture, comprising:

an extruder for extruding the mixture to form loaves having a first size;
a first dryer for surface drying said loaves;
a comminuting device for comminuting said loaves to form crumbs having a smaller size than said loaves; and
a second dryer for further drying said crumbs.

[Claim 16] 16. The system of claim 15, wherein at least said first dryer comprises a fluid bed dryer.

[Claim 17] 17. The system of claim 15, wherein said comminuting device comprises a first cutter for coarse cutting and a second cutter for fine cutting.

[Claim 18] 18. The system of claim 15, wherein said comminuting device comprises said first cutter for a first size reduction and wherein said system further comprises a grinder downstream of said second dryer for a second size reduction.

[Claim 19] 19. The system of claim 15, further comprising a tempering chamber positioned between said extruder and said comminuting device.

[Claim 20] 20. The system of claim 15, further comprising a sizing device for sizing said crumbs.

[Claim 21] 21. The system of claim 15, further comprising a plurality of vertically extending transport lines connecting said extruder, said first dryer, said comminuting device, and said second dryer.

[Claim 22] 22. The system of claim 21, wherein said plurality of vertically extending transport lines comprises a plurality of pneumatic conveying lines.

[Claim 23] 23. The system of claim 21, wherein said plurality of vertically extending transport lines comprises gravity for conveying.

[Claim 24] 24. The system of claim 15, comprising in series said first dryer, a first cutter for coarse cutting, a second cutter for fine cutting, said second dryer, and a grinder.

[Claim 25] 25. The system of claim 24, further comprising a first bypass line connected between said first cutter and said second dryer for bypassing said second cutter and a second bypass line bypassing said grinder.

[Claim 26] 26. The system of claim 15, wherein said extruder is heated.

[Claim 27] 27. The system of claim 15, wherein said extruder comprises a cutter.

[Claim 28] 28. A system for manufacturing a plurality of product crumbs, comprising:

- an extruder for forming a plurality of product loaves;
- means for drying said plurality of product loaves;
- means for tempering said plurality of product loaves;
- means for cutting said plurality of product loaves into said plurality of product crumbs; and
- means for drying said plurality of product crumbs.

[Claim 29] 29. The system of claim 28, further comprising means for grinding said plurality of product crumbs.

[Claim 30] 30. The system of claim 28, further comprising means for sizing said plurality of product crumbs.

[Claim 31] 31. The system of claim 28, further comprising a plurality of pneumatic transport means.

[Claim 32] 32. A system for manufacturing a plurality of product crumbs, comprising:

- an intake station;
- an extrusion station;
- a first drying station;
- a tempering station
- a chopping station; and
- a further drying station.